

ABSTRACT OF THE DISCLOSURE

A channel equalizer for a single-carrier receiver interacting with a Trellis decoder and a channel equalization method therefor. The channel equalizer includes a first equalizer having a first feed forward (FF) unit for eliminating a pre-ghost of an input signal and a first feedback (FB) unit for eliminating a post-ghost of the input signal, a Trellis decoder for Trellis-decoding an output signal of the first equalizer, and a second equalizer having a second FF unit for eliminating the pre-ghost of the input signal and a second FB unit for eliminating the post-ghost of the input signal based on a signal decoded by the Trellis decoder. The first and second equalizers, interacting with the Trellis decoder, enable the equalization performance and speed of the channel equalizer to be enhanced.